# SSERC logo

**SSERC Risk Assessment** (revised version March 2018)

(based on HSE’s INDG 163 ‘Risk assessment - A brief guide to controlling risks in the workplace’)

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| Activity assessed | Methane Tin |
| *Date of assessment* | 30th June 2020 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 |
| --- | --- | --- | --- |
| *List Significant hazards here:* | *Who might be harmed and how?* | *What are you already doing?**What further action is needed?* | *Actions* |
| *by whom?* | *Due date* | *Done* |
| Methane oxygen mixture is explosive between 5 and 15% | Demonstrator / Audience by premature explosion | Allow at least 2 minutes of filling with gas to ensure all air is swept out of the tin. Do not approach tin when flame dies down-it will still be burning inside the tin. Treat it like an unexploded firework!Use a safety screen. Wear appropriate eye protection. |  |  |  |
| Methane is flammable | Demonstrator / Audience by gas fire | Turn off gas supply before igniting gas at hole in lid.  |  |  |  |

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| **Description of activity:**A large coffee tin has a hole punched in the lid and another hole punched in the base. The gas is lit at the hole in the lid, burns down and eventually explodes inside the tin, blowing the lid off. |
| **Additional comments:****Do not be tempted to try this with hydrogen-very dangerous.** |